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UNITED STATES PATENT AND TRADEMARK OFFICE

Examiner: Gherbi, Suzette Jaime J

Art Unit: 3738

Docket No. 3812

In re:

Applicant: AWENGEN, D., et al

Serial No.: 10/586,718

Filed: 04/28/2008

REQUEST FOR RECONSIDERATION

October 18, 2010

Commissioner for Patents
P O Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action of June 16, 2010, please amend
the application as follows:

In the claims:

Claims 1-20 cancelled.

21. (currently amended) An auditory ossicle prosthesis for replacing or bridging at least one element in a human auditory ossicle chain, whereby the auditory ossicle prosthesis is composed of a material selected from the group consisting of an elastic material and a material having at least one articulated connection, the auditory ossicle prosthesis comprising a prosthesis element; means for frequency adjustment of sound transmission in a middle ear, said means for frequency adjustment including lever elements for changing lever conditions in the auditory ossicle chain, ~~and wherein~~ said prosthesis element has at least one ball joint connection, and wherein said means for frequency adjustment include the lever elements configured so that effective lengths or lever conditions are changeable depending on a predetermined frequency response.

22. (previously presented) An auditory ossicle prosthesis as defined in claim 39; and further comprising a first clip for attaching said prosthesis element to the anvil projection, a first rod arranged on said first clip and having an end configured as a ball, a U-shaped socket component in which

said ball is arranged and which gradually changes to a second rod that ends as an element selected from the group consisting of a piston and a further clip.

23. Claim 23 cancelled.

24. (previously presented) An auditory ossicle prosthesis as defined in claim 22, wherein an element selected from the group consisting of said first clip, said further clip, and both has two flexible tongs arranged in a shape selected from the group consisting of a V-shape and a U-shape.

25. (previously presented) An auditory ossicle prosthesis as defined in claim 22, wherein an element selected from the group consisting of said first clip, said further clip, and both is roughened at its point of contact selected from the group consisting of its point of contact with the end projection, its point of contact with the stapes, and both.

26. (previously presented) An auditory ossicle prosthesis as defined in claim 22, wherein an element selected from the group consisting of said first clip, said further clip, and both has a holding grip.

27. (currently amended) An auditory ossicle prosthesis as defined in claim ~~24~~39, wherein said prosthesis element at one end is directly connected by way of opening human cochlea by cochleotomy.

28. (previously presented) An auditory ossicle prosthesis as defined in claim 27; and further comprising a piston via which said one end of said prosthesis is directly connected.

29. (currently amended) An auditory ossicle prosthesis as defined in claim ~~24~~39, wherein the prosthesis or parts thereof are composed of a biocompatible synthetic material.

30. (previously presented) An auditory ossicle prosthesis as defined in claim 29, wherein the prosthesis or parts thereof are composed of materials selected from the group consisting of silicon and composite fiber materials.

31. (currently amended) An auditory ossicle prosthesis as defined in claim ~~24~~39, wherein the prosthesis or parts thereof are composed of a material selected from the group consisting of titanium, gold, tantalum, and an alloy thereof.

32. (currently amended) An auditory ossicle prosthesis as defined in claim 2439, wherein the prosthesis or parts thereof are composed of a material with memory effect.

33. (currently amended) An auditory ossicle prosthesis as defined in claim 2439, wherein said means for frequency adjustment includes a device for changing a point of attachment of said prosthesis element on an element selected from the group consisting of a hammer, the anvil projection, the stapes, and at the inner ear, in dependence on a predetermined frequency response.

34. Claim 34 cancelled.

35. (currently amended) An auditory ossicle prosthesis as defined in claim 2439; and further comprising at least one additional mass attached to one part of said prosthesis element or the auditory ossicle chain in dependence on a desired, predeterminable frequency response of a sound transmission in the middle ear.

36. (previously presented) An auditory ossicle prosthesis as defined in claim 35; and further comprising a second clip attaching said additional mass to a part of said prosthesis element or the auditory ossicle chain.

37. (currently amended) An auditory ossicle prosthesis as defined in claim 24~~39~~, wherein said prosthesis element is connected to an active vibration component of a hearing aid; and further comprising means for connecting said prosthesis element to the active vibration component of the hearing aid.

38. Claim 38 cancelled.

39. (currently amended) ~~An auditory ossicle prosthesis as defined in claim 24~~An auditory ossicle prosthesis for replacing or bridging at least one element in a human auditory ossicle chain, whereby the auditory ossicle prosthesis is composed of a material selected from the group consisting of an elastic material and a material having at least one articulated connection, the auditory ossicle prosthesis comprising a prosthesis element; means for frequency adjustment of sound transmission in a middle ear, said means for frequency adjustment including lever elements for changing lever conditions in the auditory ossicle chain, wherein said prosthesis element has at least one ball joint connection, wherein said means for frequency adjustment include the lever elements for changing lever conditions in the auditory ossicle chain, whose effective length or lever conditions are changeable in dependence on a predetermined frequency response, wherein said prosthesis element on one side is attachable to an anvil projection and on the other side is attachable to stapes,

or is directly inserted into an inner ear, said prosthesis element being configured so that from its connection to the anvil projection it largely copies a course of the natural anvil projection to its end or beyond it and in an area of a natural end of the anvil projection runs at an angle to another end point of the prosthesis element on the stapes or on/in the inner ear, said lever elements including a lever section that extends the natural end of the anvil projection.

40. (new) An auditory ossicle prosthesis for replacing or bridging at least one element in a human auditory ossicle chain, whereby the auditory ossicle prosthesis is composed of a material selected from the group consisting of an elastic material and a material having at least one articulated connection, the auditory ossicle prosthesis comprising a prosthesis element; means for frequency adjustment of sound transmission in a middle ear, said means for frequency adjustment including lever elements for changing lever conditions in the auditory ossicle chain, wherein said means for frequency adjustment include the lever elements for changing lever conditions in the auditory ossicle chain, whose effective length or lever conditions are changeable in dependence on a predetermined frequency response, wherein said prosthesis element on one side is attachable to an anvil projection and on the other side is attachable to stapes, or is directly inserted into an inner ear, said prosthesis element being configured so that from its connection to the anvil projection it largely copies a course of the natural anvil projection to its end or beyond it and in an area of a natural end of

the anvil projection runs at an angle to another end point of the prosthesis element on the stapes or on/in the inner ear, said lever elements including a lever section that extends the natural end of the anvil projection.

41. (new) An auditory ossicle prosthesis for replacing or bridging at least one element in a human auditory ossicle chain, whereby the auditory ossicle prosthesis is composed of a material selected from the group consisting of an elastic material and a material having at least one articulated connection, the auditory ossicle prosthesis comprising a prosthesis element; means for frequency adjustment of sound transmission in a middle ear, said means for frequency adjustment including lever elements for changing lever conditions in the auditory ossicle chain, and wherein said means for frequency adjustment include the lever elements configured so that effective lengths or lever conditions are changeable depending on a predetermined frequency response.

REMARKS

The last Office Action has been carefully considered.

It is noted that Claims 21-24, 26-29, 31, 33-34, 37-38 are rejected under 35 USC 102(a) over the U.S. patent application publication to Kurz.

Claim 29 is rejected under 35 USC 103(a) as above, and further in view of the U.S. patent to Kurz.

Claim 32 is rejected under 35 USC 103(a) as above, and further in view of the U.S. patent application publication to Knox.

Claims 35 and 36 are rejected under 35 USC 103(a) as above, and further in view of the U.S. patent to Hurst.

At the same time, the Examiner indicated that Claim 39 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Examiner's indication of the allowability of Claim 39 has been gratefully acknowledged. In connection with this indication, Claim 39 has been amended by introducing into it the features of Claim 21 from which it was dependent. It is respectfully submitted that Claim 39 as now amended should be allowed.

Applicant also submitted Claim 40 which is a combination of original Claims 21 and 39, but does not include the at least one ball joint connection. It is believed that the allowability of Claim 39 was based on the features defined exclusively in Claim 39, and therefore the ball joint connection should not affect the patentability of Claim 40.

After carefully considering the Examiner's grounds for rejection of the claims, applicants amended Claim 21, by including into it the features of Claim 34. The thusly amended Claim 21 does not raise any new issues for examination or search after the final Office Action, since it combines the features of Claim 21 and 34 which were examined before the final action.

Applicants also submitted new Claim 41 which comprises all features of the amended Claim 21, without the at least one ball joint connection.

Claims 31 and 41 define an auditory ossicle prosthesis comprising a prosthesis element, and means for frequency adjustment of sound transmission in a middle ear including lever elements for changing lever conditions in the auditory ossicle chain, wherein the lever elements of the means for frequency adjustment are configured so that effective length or lever conditions are changeable depending upon a pre-determined frequency response.

The patent application publication to Kurz 2002/0045939 has been carefully considered. '

While the Examiner's statement that this reference disclosed an elastic ossicular prosthesis with a clip configured to receive a stapes and coupled to articulate a ball-joint connection, which is coupled to a shaft lever for adjustment of frequency transmission, comprising u-shaped clips for gripping and holding an anvil is correct, this reference does not disclose the above mentioned new features of the present invention which are now defined in Claims 21 and 41.

The Examiner agreed that this reference did not specifically state means for frequency adjustment of sound transmission in a middle ear, including

lever elements for changing lever conditions in the auditory ossicle chain, but she said that it can be derived from another part of the reference.

However, the paragraph cited by the Examiner did not include any suggestions that the means for frequency adjustment with the lever elements are configured so that effective lengths or lever conditions are changeable depending on a predetermined frequency adjustment. This paragraph deals with adjustment of the prosthesis or the hearing device to the corresponding characteristics in the middle ear and does not specify the above-mentioned new features of the present invention.

It is respectfully submitted that the reference does not disclose the new features of the present invention which are now defined in Claims 21 and 41, in particular the means for frequency adjustment which include the lever elements configured so that effective lengths or lever conditions are changeable depending on a predetermined frequency response.

The other references applied in combination with the primary reference also do not disclose the new features of the present invention as defined in Claims 21 and 41.

It is therefore respectfully submitted that these claims should be considered as patentably distinguishing over the art and should be allowed.

The dependent claims have been amended to depend on the allowable Claim 39, and they should be allowed as well.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Any costs involved should be charged to the deposit account of the undersigned (No. 19-4675). Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance; he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,



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